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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/562,336

12/23/2005

Makoto Ikeda

KNJ-214-A

3612

21828

7590

03/18/2008

CARRIER BLACKMAN AND ASSOCIATES

24101 NOVI ROAD

SUITE 100

NOVI, MI 48375

EXAMINER

WARD, JOHN A

ART UNIT

PAPER NUMBER

2885

NOTIFICATION DATE

DELIVERY MODE

03/18/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

cbalaw@gmail.com

cbalaw@ameritech.net

wblackman@ameritech.net

Office Action Summary	Application No. 10/562,336	Applicant(s) IKEDA ET AL.	
	Examiner John A. Ward	Art Unit 2885	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear whether the applicant is claiming a light guide as cited in claims 1-2 and 7-10 or an image reader as cited in claims 3-6 clarity is requested.

As best understood from the independent claim 1 (a light guide) the following prior art is cited.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Guy (US 6,937,791).

Regarding claim 1, Guy ('791) discloses a optical coupling apparatus and method having light guide 104as shown in figure 7 having an end face having a light emitting diode 28 providing an incident face, a emission face 18, an internal face and the light

guide having two parabolas connected by a line segment connecting the parabolas at a focal point and a line segment corresponding to the emitting face.

Regarding claim 2, figure 7 shows how the side faces of the light guide is substantially parallel to the optical axis 18.

Regarding claim 7, Guy shows how the sectional shape of the light guide as shown in figure 7 shows how the light from the light source 28 to permit the emitting face to be confined to a prescribed emission angle.

Regarding claim 8, Guy shows how the light from the light source having a scattering pattern formed inside the light guide.

Regarding claim 9 Guy shows a light guide 18 to receive the light from the light source.

Regarding claim 10, Guy shows in figure 7, how the line segment corresponding to the light emitting face of the light guide has a larger width than the line segment connecting to the focal point.

Claims 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Guy.

Regarding claim 11, Guy ('791) discloses an optical coupling apparatus and method having a light guide 104 as shown in figure 7 having an end face having a light emitting diode 28 providing an incident face, an emission face 18, an internal face and the light guide having two parabolas connected by a line segment connecting the parabolas at a focal point and a line segment corresponding to the emitting face.

Regarding claim 12, figure 7 shows how the side faces of the light guide is substantially parallel to the optical axis 18.

Regarding claim 13, the end face is adapted to receive incident light from a light source 28.

Regarding claim 14, Guy shows in figure 7, how the line segment corresponding to the light emitting face of the light guide has a larger width than the line segment connecting to the focal point.

Claims 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Guy.

Regarding claim 15, Guy ('791) discloses an optical coupling apparatus and method having light guide 104 as shown in figure 7 having an end face having a light emitting diode 28 providing an incident face, an emission face 18, an internal face and the light guide having two parabolas connected by a line segment connecting the parabolas at a focal point and a line segment corresponding to the emitting face.

Regarding claim 16, Guy shows in figure 7, how the line segment corresponding to the light emitting face of the light guide has a larger width than the line segment connecting to the focal point.

Regarding claim 17, Guy shows in figure 7, how the line segment connecting the focal points is disposed opposite to the line segment corresponding to the emitting face and has a scattering pattern formed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guy as applied to claims 1 and 2 above, and further in view of Salto et al (US 7,284,891).

Regarding claims 3-6 discloses all the limitations of the claimed invention including a light guide and light source, but does not discloses an image reader.

Regarding claims 3 and 5, Salto et al ('891) discloses a line illumination device having a light guide 5, a light source 10, a lens array 5, and a box housing 1.

Regarding claims 4 and 6, Salto et al discloses in figure 1 how the unit is arranged to cause light emitted from the emitted face of the light guide 11a toward the document G.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the light guide of Guy with the illumination device of

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Salto et al in order to provide a means of concentrating a large amount of light towards an image while maintaining a cool light source.

Response to Arguments

Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Ward whose telephone number is 571-272-2386. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong (James) Lee can be reached on 571-272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JAW

February 28, 2008

/John A. Ward/

Primary Examiner, Art Unit 2885